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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/712,572 | 11/13/2003 | Zachary Steven Smith | 200208523-1 | 8800 |
| 22879 | 7590 | 02/08/2007 | EXAMINER | |
| HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 | | | LE, MIRANDA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2167 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | | DELIVERY MODE | |
| 3 MONTHS | 02/08/2007 | | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/712,572 | SMITH ET AL. |
| | Examiner | Art Unit |
| | Miranda Le | 2167 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 November 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,10-15,20,22 and 27 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,10-15, 20, 22, 27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment, filed 11/16/07.
2. Claims 1, 10-15, 20, 22, 27 are pending in this application. Claims 1, 15, 22 are independent claims. In the Amendment, claims 2-9, 16-19, 21, 23-26, 28-32 have been cancelled, and claims 1, 10-15, 20, 22, 27 have been amended. This action is made Final.

The objection to the specification (abstract) of the invention has been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

4. Claims 1, 10-15, 20, 22, 27 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

(a) Claim 1 fails to provide a practical application that produces a tangible result, since merely "determining a statistical probability of the potential bug owners owning the bug in question, as to each of multiple potential bug owners" does not able the usefulness to be realized. It is not until the determining (which takes place as a thought or a computation within a processor) is brought out of the mind or processor that it becomes more than an abstraction, instead being real-world and enabling the functionality to be realized. The last step of claim 1 recites a determining step. Since mere determination is not a tangible result, the claim fails to recite a tangible result as the determining step is not tangible.

Claims 10-14 incorporate the deficiencies of claim 1 and do not add tangibility to the claimed subject matter, they are likewise rejected.

(b) Claim 15 has the same type of issues as (a), therefore, is rejected under similar rationale. In addition, each of the means is reasonably interpreted in view of the specification as just software; the claimed system is not limited to embodiments, which include the hardware necessary to enable any underlying functionality to be realized, instead being software per se.

Claim 20 incorporates the deficiencies of claim 15 and do not add tangibility to the claimed subject matter, it is likewise rejected.

(c) Claim 22 has the same issues as (a) therefore, is rejected under similar rationale. Plus, the claims fail to fall within a category of patentable subject matter set forth in 35 U.S.C. 101. The claimed computer-readable medium is not limited to embodiments, which include the hardware necessary to enable any underlying functionality to be realized.

Claim 20 incorporates the deficiencies of claim 22 and do not add tangibility to the claimed subject matter, it is likewise rejected.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly

owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 10, 11, 15, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glerum et al. (US Patent No. 6,944,849), in view of Bates et al. (US Patent No. 7,096,458).

As per claim 1, Glerum teaches a method for determining bug ownership comprising: scanning a bug database (*i.e. tables in Figs. 6A, 6B*) that contains bug records (*i.e. bug ID, Figs. 6A-6B*) that describe known bugs and identify owners (*i.e. software developers, col. 7, lines 36-44*) of those bugs (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

generating database tokens that represent words (*i.e. gggo, eupo, ..., esib, See assert tag column in Fig. 6A*) contained in the bug records (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*); as to each bug owner, determining the number of times each database token appears in bug records (*i.e. how many times the assert in question has been hit in all unreleased developer build versions, col. 8, lines 63-67*) owned by the bug owner (*i.e. Weidezh, Fig. 6B*) such that the number of times the database tokens appear in association with each bug owner is known (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

storing (*i.e. a separate database may be maintained that contains information about each particular bug that has been entered into a database, col. 9, lines 9-14*) the determined number of times in a derivative database (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

generating input tokens (*i.e. title, Fig. 6B*) that represent words contained in a description of a bug in question (*i.e. Developers may also have their own "unreleased" builds that they individually work on. The HitsUnreleased column 650A provides an indication of how many times the assert in question has been hit in all unreleased developers build versions, col. 8, lines 63-67*) (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

scanning (*i.e. The present invention solves this problem by tagging these asserts so that each time a particular assert is hit, it will display one unique identifier, col. 9, lines 53-57*) the derivative database for occurrences of the input tokens (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

identifying the number of times each input token appears in association with each bug owner (*i.e. Developers may also have their own "unreleased" builds that they individually work on. The HitsUnreleased column 650A provides an indication of how many times the assert in question has been hit in all unreleased developers build versions, col. 8, lines 63-67*) (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*).

Glerum does not specifically teach as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question.

However, Bates teaches as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question (*i.e. assigns an individual weight to each of the restorable debug entities, col. 3, lines 10-34*).

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum and Bates at the time the invention was made to modify the system of Glerum to include as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question as taught by Bates.

One of ordinary skill in the art would be motivated to make this combination in order to compare the restorable debug entities of each scenario to determine the extent of similarity between the scenarios in view of Bates, as doing so would give the added benefit of helping

programmers establish important breakpoint and monitor scenarios and to be able to recall these scenarios across different programs that are debugged as taught by Bates (*i.e. col. 3, lines 5-8*).

As per claim 15, Glerum teaches a system for determining bug ownership, comprising:

means for scanning a bug database (*i.e. tables in Figs. 6A, 6B*) that contains bug records (*i.e. bug ID, Figs. 6A-6B*) that describe known bugs and identify owners (*i.e. software developers, col. 7, lines 36-44*) of those bugs (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

means for generating database tokens that represent words (*i.e. gggo, eupo, ..., esib, See assert tag column in Fig. 6A*) contained in the bug records (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

means for, as to each bug owner, determining the number of times each database token appears in bug records (*i.e. how many times the assert in question has been hit in all unreleased developer build versions, col. 8, lines 63-67*) owned by the bug owner (*i.e. Weidezh, Fig. 6B*) such that the number of times the database tokens appear in association with each bug owner is known (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

means for storing (*i.e. a separate database may be maintained that contains information about each particular bug that has been entered into a database, col. 9, lines 9-14*) the determined number of times in a derivative database (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

means for generating input tokens (*i.e. title, Fig. 6B*) that represent words contained in a description of a bug in question (*i.e. Developers may also have their own "unreleased" builds that they individually work on. The HitsUnreleased column 650A provides an indication of how*

many times the assert in question has been hit in all unreleased developers build versions, col. 8, lines 63-67) (Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43);

means for scanning (i.e. The present invention solves this problem by tagging these asserts so that each time a particular assert is hit, it will display one unique identifier, col. 9, lines 53-57) the derivative database for occurrences of the input tokens (Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43);

means for identifying the number of times each input token appears in association with each bug owner (i.e. Developers may also have their own "unreleased" builds that they individually work on. The HitsUnreleased column 650A provides an indication of how many times the assert in question has been hit in all unreleased developers build versions, col. 8, lines 63-67) (Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43).

Glerum does not explicitly teach means for, as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question.

Bates teaches means for, as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question (*i.e. assigns an individual weight to each of the restorable debug entities, col. 3, lines 10-34*).

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum and Bates at the time the invention was made to modify the system of Glerum to include as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question as taught by Bates.

One of ordinary skill in the art would be motivated to make this combination in order to compare the restorable debug entities of each scenario to determine the extent of similarity

between the scenarios in view of Bates, as doing so would give the added benefit of helping programmers establish important breakpoint and monitor scenarios and to be able to recall these scenarios across different programs that are debugged as taught by Bates (*i.e. col. 3, lines 5-8*).

As per claim 22, Glerum teaches a computer-readable medium that contains a system for determining bug ownership, the system comprising:

logic configured to scan a bug database (*i.e. tables in Figs. 6A, 6B*) that contains bug records (*i.e. bug ID, Figs. 6A-6B*) that describe known bugs and identify owners (*i.e. software developers, col. 7, lines 36-44*) of those bugs (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

logic configured to generate database tokens that represent words (*i.e. gggo, eupo, ..., esib, See assert tag column in Fig. 6A*) contained in the bug records (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

logic configured to, as to each bug owner, determining the number of times each database token appears in bug records (*i.e. how many times the assert in question has been hit in all unreleased developer build versions, col. 8, lines 63-67*) owned by the bug owner (*i.e. Weidezh, Fig. 6B*) such that the number of times the database tokens appear in association with each bug owner is known (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

logic configured to store (*i.e. a separate database may be maintained that contains information about each particular bug that has been entered into a database, col. 9, lines 9-14*) the determined number of times in a derivative database (*Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43*);

logic configured to generate input tokens (*i.e. title, Fig. 6B*) that represent words contained in a description that describes a bug in question (*i.e. Developers may also have their*

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own "unreleased" builds that they individually work on. The HitsUnreleased column 650A provides an indication of how many times the assert in question has been hit in all unreleased developers build versions, col. 8, lines 63-67) (Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43); logic configured to identify the number of times each input token appears in the derivative database as per each bug owner (i.e. Developers may also have their own "unreleased" builds that they individually work on. The HitsUnreleased column 650A provides an indication of how many times the assert in question has been hit in all unreleased developers build versions, col. 8, lines 63-67) (Figs. 6A, 6B; col. 8, line 41 to col. 9, line 43).

Glerum does not fairly teach logic configured to, as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question.

Bates teaches logic configured to, as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question (*i.e. assigns an individual weight to each of the restorable debug entities, col. 3, lines 10-34*).

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum and Bates at the time the invention was made to modify the system of Glerum to include as to each of multiple potential bug owners, determining a statistical probability of the potential bug owner owning the bug in question as taught by Bates.

One of ordinary skill in the art would be motivated to make this combination in order to compare the restorable debug entities of each scenario to determine the extent of similarity between the scenarios in view of Bates, as doing so would give the added benefit of helping

programmers establish important breakpoint and monitor scenarios and to be able to recall these scenarios across different programs that are debugged as taught by Bates (*i.e. col. 3, lines 5-8*).

As per claim 10, Bates teaches the method of claim 1, wherein determining a statistical probability comprises summing the total number of occurrences of each input token in the derivative database and normalizing the total number of occurrences of each input token as to each potential bug owner (*i.e. assigns an individual weight to each of the restorable debug entities, col. 3, lines 10-34*).

As per claim 11, Bates teaches the method of claim 10, wherein determining a statistical probability further comprises scaling normalized values that result from the normalizing to obtain scaled probabilities as to each input token relative to each potential bug owner (*i.e. assigns an individual weight to each of the restorable debug entities, col. 3, lines 10-34*).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glerum et al. (US Patent No. 6,944,849), in view of Bates et al. (US Patent No. 7,096,458), and further in view of Walter et al. (US Patent No. 4,980,857).

As per claim 12, Glerum and Bates do not specifically teach determining the standard deviance for each scaled probability and removing tokens associated with given potential bug owners form consideration when those tokens exhibit a deviance below a predetermined minimum deviance.

Walter teaches determining the standard deviance for each scaled probability and removing tokens associated with given potential bug owners form consideration when those tokens exhibit a deviance below a predetermined minimum deviance (*i.e. a deviance check between the voted data value and each copy of the received data value, and will generate an error vector to the Fault Tolerator identifying each Node which generated a data value which differed from the voted data value by more than a predetermined amount, col. 9, lines 29-49; col. 47, lines 13-31.*)

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum, Bates and Walter at the time the invention was made to modify the system of Glerum and Bates to include determining the standard deviance for each scaled probability and removing tokens associated with given potential bug owners form consideration when those tokens exhibit a deviance below a predetermined minimum deviance as taught by Walter.

One of ordinary skill in the art would be motivated to make this combination in order to generate an error vector to the Fault Tolerator in view of Walter, as doing so would give the added benefit of identifying each Node which generated a data value which differed from the voted data value by more than a predetermined amount as taught by Walter (*col. 9, lines 29-49*).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glerum et al. (US Patent No. 6,944,849), in view of Bates et al. (US Patent No. 7,096,458), in view of Walter et al. (US Patent No. 4,980,857), and further in view of Chiang et al. (US Patent No. 7,013,457).

As per claim 13, Glerum, Bates and Walter do not explicitly teach determining the statistical probability using the scaled probabilities.

However, Chiang teaches determining the statistical probability using the scaled probabilities (*i.e. For every program code statement in the first sensitized set, a value of one is added to the corresponding element in the priority set, which acts as a scaling function that indicates a reduced computed probability of the related program code statement as being a source of the bug: Sensitized set:{21,29,30} Error set: {20,21,24,25,27,29,30,3b} Priority values:{0,0+1,0,0,0+1,0}, col. 6, lines 21-27.*)

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum, Bates, Walter and Chiang at the time the invention was made to modify the system of Glerum, Bates and Walter to include determining the statistical probability using the scaled probabilities as taught by Chiang.

One of ordinary skill in the art would be motivated to make this combination in order to indicate a reduced computed probability of the related program code statement as being a source of the bug in view of Chiang, as doing so would give the added benefit of enabling a user who debugging the code can quickly refer to those lines of code that are deemed to be the most probable sources of the bug as taught by Chiang (*col. 2, lines 17-22*).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glerum et al. (US Patent No. 6,944,849), in view of Bates et al. (US Patent No. 7,096,458), in view of Walter et al. (US Patent No. 4,980,857), in view of Chiang et al. (US Patent No. 7,013,457), and further in view of Booth et al. (US Patent No. 5,922,079).

As per claim 14, Glerum, Bates, Walter and Chiang do not explicitly teach determining a statistical probability further comprises applying Bayes' Theorem to the scaled probabilities to calculate the overall probability for each potential bug owner of owning the bug in question.

However, Booth teaches determining a statistical probability further comprises applying Bayes' Theorem to the scaled probabilities to calculate the overall probability for each potential bug owner of owning the bug in question (*i.e. The Effect of Assuming Independence in Applying Bayes' Theorem to Risk Estimation and Classification in Diagnosis, col. 4, lines 28-42*).

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum, Bates, Walter, Chiang and Booth at the time the invention was made to modify the system of Glerum, Bates, Walter and Chiang, to include determining the overall probability of ownership as to a potential owners comprises applying Bayes Theorem to the scaled probabilities of the potential owners to calculate probability for each potential owner of owning the bug in question as taught by Booth.

One of ordinary skill in the art would be motivated to make this combination in order to independently assign weights to the component failures in view of Booth, as doing so would give the added benefit of automatically analyzing and troubleshooting for identifying potential problems with the test suit and modeling errors based on incorrect diagnoses as taught by Booth (*col. 5, lines 34-59*).

9. Claims 20, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glerum et al. (US Patent No. 6,944,849), in view of Bates et al. (US Patent No. 7,096,458), and further in view of Booth et al. (US Patent No. 5,922,079).

As to claim 20, 27, Glerum, Bates do not fairly teach determining a statistical probability further comprises applying Bayes' Theorem to the scaled probabilities to calculate the overall probability for each potential bug owner of owning the bug in question.

However, Booth teaches determining a statistical probability further comprises applying Bayes' Theorem to the scaled probabilities to calculate the overall probability for each potential bug owner of owning the bug in question (*i.e. The Effect of Assuming Independence in Applying Bayes' Theorem to Risk Estimation and Classification in Diagnosis, col. 4, lines 28-42*).

It would have been obvious to one of ordinary skill of the art having the teaching of Glerum, Bates, and Booth at the time the invention was made to modify the system of Glerum, Bates to include determining the overall probability of ownership as to a potential owners comprises applying Bayes Theorem to the scaled probabilities of the potential owners to calculate probability for each potential owner of owning the bug in question as taught by Booth.

One of ordinary skill in the art would be motivated to make this combination in order to independently assign weights to the component failures in view of Booth, as doing so would give the added benefit of automatically analyzing and troubleshooting for identifying potential problems with the test suit and modeling errors based on incorrect diagnoses as taught by Booth (*col. 5, lines 34-59*).

Response to Arguments

10. Applicant's arguments regarding claims 1-9, 15-19, 21-26, 28, 29, and 31 have been rejected under 35 U.S.C. §102(e) as being anticipated by Glerum et al., claims 10-14, 20, and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Glerum in view of one or

more of Bates et al., Booth et al., and Walter et al, have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 11/16/06 have been fully considered but they are not persuasive.

Glerum does not teach a method or system determining bug ownership.

On page 9 of Remarks, Applicants indicated that the owner of the bug is a person who is responsible. Further on page 10, Applicants clearly states a bug ownership as who is responsible for fixing a given bug.

Accordingly, Glerum teach a bug ownership as "information about which software *developer* is currently assigned to eliminate the bug" in col. 9, lines 20-26.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le

February 05, 2007



JOHN COTTINGHAM
SUPPLYING PATENT EXAMINER
TECHNOLOGY CENTER 2100